

SEED CRYSTAL HOLDERS AND SEED CRYSTALS FOR FABRICATING SILICON CARBIDE CRYSTALS AND METHODS OF FABRICATING SILICON CARBIDE CRYSTALS

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Abstract of the Disclosure

Methods for producing silicon carbide crystals, seed crystal holders and seed crystal for use in producing silicon carbide crystals and silicon carbide crystals are provided. Silicon carbide crystals are produced by forcing nucleation sites of a silicon carbide seed crystal to a predefined pattern and growing silicon carbide
10 utilizing physical vapor transport (PVT) so as to provide selective preferential growth of silicon carbide corresponding to the predefined pattern. Seed holders and seed crystals are provided for such methods. Silicon carbide crystals having regions of higher and lower defect density are also provided.